

IN THE CLAIMS:

1. (Currently Amended): A batch process for preparation of ampicillin comprising:

- a) acylating 6-aminopenicillanic acid (6-APA) with a phenylglycine derivative in the presence of an enzyme to form a reaction mixture;

wherein the process is carried out ~~under the following conditions:~~ while

- i) maintaining the total concentration in the reaction mixture of 6-APA and ampicillin combined ~~is~~, substantially throughout the reaction, greater than 250 mM;
- ii) metering in the 6-APA and or the phenylglycine derivative to thereby maintain the concentration of dissolved 6-APA ~~is~~ lower than 300 mM throughout the reaction; and
- iii) maintaining the molar ratio of the total quantity of phenylglycine derivative to the total quantity of 6-APA ~~is~~ less than 2.5.

2. (Previously Amended): Process according to Claim 1, wherein the total concentration of the 6-APA and ampicillin present in the reaction mixture ~~is~~, substantially throughout the reaction, greater than 300 mM.

3. (Previously Amended): Process according to any one of Claims 1 or 2, wherein the concentration of dissolved 6-APA is kept lower than 250 mM throughout the reaction.

4. (Previously Amended): Process according to claim 1, wherein the molar ratio of the total quantity of phenylglycine derivative to the total quantity of 6-APA ~~is~~ less than 2.0.

5. (Canceled).

6. (Currently Amended): Process according to Claim 5 1, wherein the phenylglycine derivative is metered in as a salt of D-phenylglycine amide and an acid.
7. (Previously Amended): Process according to Claim 6, wherein the phenylglycine derivative is metered in the form of a solution of D-phenylglycine amide.1.2 H₂SO₄ in water.
8. (Currently Amended): Process according to Claim 5 1, wherein the metering of phenylglycine derivative is controlled by means of pH measurement.
9. (Canceled).
10. (Canceled).
11. (Previously Amended) Process according to claim 1, wherein the total concentration in the reaction mixture of 6-APA and ampicillin combined is greater than 250 ml throughout the reaction mixture.
12. (Canceled).
13. (Canceled).
14. (New): Process according to Claim 1, wherein, in order to maintain the concentration of dissolved 6-APA lower than 300 mM throughout the reaction, a portion of the total amount of 6-APA is charged to the reaction mixture at the beginning of the reaction and the remainder is introduced during the remainder of the reaction.
15. (New) Process according to Claim 14, wherein the concentration of dissolved 6-APA is kept lower than 250 mM throughout the reaction.
16. (New): Process according to Claim 15, wherein the total concentration of the 6-APA and ampicillin present in the reaction mixture is, substantially throughout the reaction, greater than 300 mM.